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TRAINING
WITHIN
INDUSTRY
•
WPB
LABOR DIVISION

MORE PRODUCTION THROUGH TRAINING

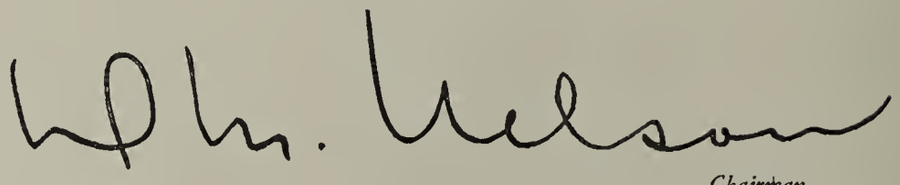
*The*

# TRAINING WITHIN INDUSTRY PROGRAM

*(January, 1942)*

WE must build fleets of ships where we built one ship before; thousands of planes where we made a few dozen . . . myriads of tanks, guns, and all other weapons to defend democracy and back up our men in uniform. They will be produced in time ONLY if all wheels of American industry are properly turned by huge numbers of people, including millions now engaged in nonwar efforts.

"Old and new workers will do the right kind of job——*on time*——when given the right kind of training in the shortest possible time."



*Chairman.*

**WAR PRODUCTION BOARD**

# *The*
# PROGRAM

The Office of Production Management established the Training Within Industry Program—staffed by training and personnel experts borrowed from industry—to assist defense contractors and subcontractors in meeting increased needs for skilled workers and supervisors.

Underlying PURPOSE of the "TWI" activity is:

> ***To assist defense industries to meet their manpower needs by training within industry each worker to make the fullest use of his best skill up to the maximum of his individual ability, thereby enabling production to keep pace with defense demands.***

Training Within Industry deals particularly with industry's own personnel responsibilities. Special attention is devoted to:

1. *UPGRADING* of all classes of personnel as their experience and abilities warrant, through planned job progression, job rotation, and intensive supplementary instruction both on and off the job. Each plant should take stock of the talent and experience of its own personnel before employing new men.

2. Development of *PRODUCTION SPECIALISTS* through intensive instruction *on the job* according to basic operations.

3. Development of all-around *SKILLED MECHANICS* through trades apprenticeship, in accordance with Federal standards, separate from production worker training, for the purpose of developing a predetermined, limited number of all-around journeymen mechanics.

4. Development of *SUPERVISORS* through careful selection, assignment of supervisory duties of increasing responsibility, and provision for related organized help through discussions and conferences under both plant and outside auspices; also the development of technical and other management assistants.

Training Within Industry renders specific ADVISORY ASSISTANCE to defense industries in inaugurating programs which they carry on within their own plants, at their own expense. There is no authority to enter a plant on any basis other than with management's cooperation.

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## HOW "TWI" ASSISTS DEFENSE INDUSTRY

Four general types of assistance apply in most cases and are being adapted *to fit conditions in each specific plant:*

A. Help in the *analysis of training needs.*

B. Aid in *setting up a program* within the plant to meet its needs.

C. *Transmit experience of other employers* who have met their training problems. This is cleared through "TWI" headquarters and its field organization.

D. Aid in the most *effective use of tax-supported Government agency services,* such as State and Federal employment services, vocational and trade schools, engineering colleges, NYA, WPA, CCC. Only through interpreting job requirements and the needs of industry to those agencies and gaining their closest coordination can maximum preemployment education and experience be furnished, as well as related supplementary instructions for employed workers.

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## RELATED SOURCES OF TRAINING

*Training outside of industry* includes preemployment and supplementary instruction. This part of the program is being provided for by Vocational Education for National Defense through public and private schools and by Engineering, Science, and Management Defense Training courses in colleges.

National Youth Administration, Work Projects Administration, and Civilian Conservation Corps also offer opportunities for preemployment work experience insuring better preparation for productive work in defense industries.

All these are of vital interest to industry and the closest kind of cooperation must be continuously maintained with them. Of utmost importance is that the industries served participate actively with the schools in setting up entrance standards, so that all who complete the school training will be acceptable for employment. It is also important that the numbers of persons so specially trained be not greatly in excess of the needs of the industries served.

# *The* POLICY *approved by both Management and Labor*

"LEARN BY DOING — PRODUCE WHILE LEARNING"

In this emergency, as well as in more normal times, it is good American practice and efficient business to have each worker make the fullest use of his best skill up to the maximum of his individual ability. Only through such use of the intelligence and skill of the Nation's manpower will production keep pace with defense needs.

1. Additional workers will not be trained unless the available unemployed of equal skill have been absorbed or none are available locally.

2. There are normal losses from among skilled workers due to advancement into supervisory positions, changes to other occupations, sickness, death, and retirement. These losses go on continuously, and it is necessary to bring along well-trained workers to replace them. In addition, there is need to make up for the lack of apprentice training during the past 10 years. These are the reasons why organized apprenticeship programs are so important now.

There are two important phases of apprentice training:

> Definitely planned program of experience, scheduled and assigned step by step to enable the apprentice over a predetermined time to acquire skill in increasingly difficult kinds of work in a trade. For every skilled job there is related technical matter, much of which can best be taught off the job. To be effective, this related instruction must be very closely tied into the current job experience. Practice, related theory, and technical knowledge must go hand in hand. Workers, employers, and technical educators should collaborate in determining what shall be included in this instruction and how it can best be related to the work experience.

The proportion of apprentices to be trained can best be determined in local areas in numbers and programs agreed upon in joint conferences between management and interested groups of employees or by agreements arrived at by collective bargaining units.

3. In a less formal way, many workers acquire a breadth of experience by learning one job at a time and becoming skilled in that, and advancing to a higher grade of work when opportunity permits. In an upgrading program the time cannot be definite; it is controlled by available opportunities, depending upon production programs and specific vacancies as they occur. This differs from an apprenticeship program where the opportunity is controlled by advance agreement. Therefore, while craftsman experience may be gained by an apprentice in from 3 to 4 years, it may take the production specialist two or three times as long, or longer, to acquire corresponding skill and versatility through an upgrading program.

In times of rapid expansion when there is a shortage of skilled workers, there is no choice but that of using inexperienced workers from other kinds of work or young people without any work experience but with good orientation background gained in public vocational schools during preemployment training. Through intensive instruction they must then be brought to their highest skill on a limited operation in the shortest possible time. Advancement

into more skilled work should always be made from among employees of longer experience on jobs which are good foundations for the higher skills. Attempts should not be made to replace skilled workers by narrowly skilled specialists.

This puts upon management a two-fold responsibility:

> Foremen, instructors, and experienced workers must assist less experienced workers in acquiring new skills; and they should see that employees who have the desire and capacity for advancement be not kept indefinitely on jobs requiring skill in single operations.

4. Apprenticeship, upgrading, and supervisory training programs within industry are greatly implemented by making available opportunities for individuals to get instruction and related knowledge which enable them to fit themselves for advancement. Whether these facilities are made available by public educational institutions, employers or organized labor groups, it is essential that there be continuous consultation between students, management, and educators. Only through such cooperation can the instruction be of immediate practical value.

Such philosophy, such practices, and such consultation should result in well-balanced training programs, and bring about an orderly and an effective approach to creating and maintaining a supply of competent workers available to meet the rapidly increasing needs of defense industry.

*United Aircraft Corporation.*

*Lockheed Aircraft Corporation.*

*United States Rubber Co.*

*Westinghouse Electric and Manufacturing Co.*

*International Association of Machinists.*

*The Falk Corporation.*

*Steel Workers Organizing Committee.*

*United Automobile Workers of America.*

*Industrial Union of Marine and Shipbuilding Workers of America.*

E. J. ROBESON
*Newport News Shipbuilding and Dry Dock Co.*

*International Brotherhood of Electrical Workers.*

*Operative Plasterers and Cement Finishers International Assn.*

THE ADVISORY COMMITTEE ON TRAINING OF THE LABOR DIVISION, OPM, AS OF APRIL 1941

# *The* ORGANIZATION

## Administrative Staff

**C. R. DOOLEY, Director**
Walter Dietz, Associate Director
William Conover, Assistant Director
M. J. Kane, Assistant Director
William F. Patterson, Chief of Apprenticeship
(U. S. Dept. of Labor)

## Training Specialists

H. H. Blomeier
L. W. Emerson
Leonard Gappa
George Jaquet
William K. Opdyke

## Headquarters Advisory Committee

| | | |
|---|---|---|
| Burke, M. F. | United Aircraft Corporation | East Hartford, Conn. |
| Ching, C. S. | United States Rubber Co. | New York, N. Y. |
| Davison, E. C. | International Association of Machinists | Washington, D. C. |
| Golden, Clinton | Steel Workers Organizing Committee | Pittsburgh, Pa. |
| Green, John | Industrial Union of Marine & Shipbuilding Workers of America | Camden, N. J. |
| Hedges, Marion | International Brotherhood of Electrical Workers | Washington, D. C. |
| Irwin R. R. | Lockheed Aircraft Corporation | Burbank, Calif. |
| Marshall, W. G. | Westinghouse Electric & Manufacturing Co. | Pittsburgh, Pa. |
| Ode, K. F. | The Falk Corporation | Milwaukee, Wis. |
| Reuther, Walter P. | United Automobile Workers of America | Detroit, Mich. |
| Rooney, John E. | Operative Plasterers & Cement Finishers International Association | Washington, D. C. |
| Sobey, Maj. Albert | General Motors Institute | Flint, Mich. |

## Headquarters Consultants

| | | |
|---|---|---|
| Gates, Allen B. | Eastman Kodak Co. | Rochester, N. Y. |
| Mann, C. R. | American Council on Education | Washington, D. C. |
| Moore, Louise | U. S. Office of Education | Washington, D. C. |
| Sobey, Maj. Albert | General Motors Corporation | Flint, Mich. |
| Via, G. G. | Newport News Shipbuilding & Dry Dock Co. | Newport News, Va. |
| Viteles, Morris S. | Philadelphia Electric Co. | Philadelphia, Pa. |
| Whiteside, Bartley | Wright Aeronautical Co. | Paterson, N. J. |

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**HEADQUARTERS**
**Fourth St. and Independence Ave. SW.**
**WASHINGTON, D. C.**

# FIELD ORGANIZATION

★ In addition to the names shown, each district staff includes ten or more consultants who are not listed

| DISTRICT | Office Address— | Representative and Assistant— |
|---|---|---|
| 1 | **Northern New England**<br>Maine, Massachusetts, Vermont, New Hampshire<br>Room 1033,<br>Park Square Building,<br>**Boston,** Mass. (Hubbard 0380) | **Clarence G. McDavitt,**<br>New England Telephone & Telegraph Co.<br>Wayne E. Keith,<br>Associate Representative<br>Gilbert H. Tapley, Assistant Representative<br>John H. Frye, Assistant Representative |
| 2 | **Southern New England**<br>Connecticut, Rhode Island<br>Room 513,<br>152 Temple Street,<br>**New Haven,** Conn. (6–5186) | **Ernest A. Stowell,**<br>Underwood Elliott Fisher Co.<br>A. E. Whitehill,<br>Assistant Representative |
| 3 | **Upstate New York**<br>New York State<br>(exclusive of Metropolitan New York) | **D. J. Hoose,** Acting Representative<br>Raymond T. Murray, Acting Assistant Representative<br>(See District 4 below) |
| 4 | **Metropolitan New York**<br>Room 2026,<br>11 West 42d Street,<br>**New York,** N. Y. (Penn. 6–0486) | **D. J. Hoose,**<br>The Texas Co.<br>Raymond T. Murray, Assistant Representative |
| 5 | **New Jersey**<br>Room 601,<br>605 Broad Street,<br>**Newark,** N. J. (Mitchell 2–1114) | **Glenn L. Gardiner,**<br>Forstmann Woolen Co.<br>Arthur H. Myer, Assistant Representative<br>Clifton H. Cox, Assistant Representative |
| 6 | **Eastern Pennsylvania and Delaware**<br>Room 2301,<br>12 South 12th Street,<br>**Philadelphia,** Pa. (Walnut 6820) | **H. W. Jones,**<br>The Atlantic Refining Co.<br>Clarence N. Cone,<br>Assistant Representative |
| 7 | **Maryland**<br>Room 3106,<br>Baltimore Trust Building,<br>**Baltimore,** Md. (Plaza 1654) | **C. R. Hook, Jr.,**<br>Rustless Iron & Steel Corporation<br>Henry T. Douglas,<br>Assistant Representative |
| 8 | **Atlantic Central**<br>Virginia, North and South Carolina<br>Raleigh Building,<br>Fayetteville and Hargett Streets,<br>**Raleigh,** N. C. (2–3306) | **George G. Arthur,**<br>The Champion Paper & Fibre Co.<br>Grover S. Tome,<br>Assistant Representative |
| 9 | **Southeastern**<br>Georgia, Florida, Alabama, Mississippi, Central and Eastern Tennessee<br>Georgia School of Technology,<br>225 North Avenue NW.,<br>**Atlanta,** Ga. (Hemlock 6890) | **J. E. McDaniel,**<br>Georgia School of Technology<br>James Ira Teat,<br>Assistant Representative |
| 10 | **Ohio Valley**<br>Southern Ohio, Southern West Virginia, Kentucky<br>Room 840,<br>Union Trust Bldg.,<br>**Cincinnati,** Ohio. (Cherry 3740) | **Paul Mooney,**<br>Kroger Grocery and Baking Co.<br>Walter P. Hildebrand<br>Assistant Representative |
| 11 | **Western Pennsylvania** (except Erie County) and Northern West Virginia<br>Room 360, Administration Bldg.,<br>Carnegie Institute of Technology,<br>**Pittsburgh,** Pa. (Mayflower 2600) | **C. S. Coler,**<br>Westinghouse Electric & Manufacturing Co.<br>Birl E. Shultz,<br>Assistant Representative |
| 12 | **Northern Ohio** (except Lucas County) and Erie County, Pa.<br>Room 797,<br>Union Commerce Bldg.<br>925 Euclid Avenue,<br>**Cleveland,** Ohio. (Cherry 2984) | **Oscar Grothe,**<br>White Sewing Machine Co.<br>Lowell O. Mellen,<br>Assistant Representative<br>Raymond G. James,<br>Assistant Representative |

# Advisers

# Districts 1 to 12, inclusive

| Labor Advisers— | Management Advisers— | DISTRICT |
|---|---|---|
| Joseph J. Kelleher,<br>Worcester Industrial Union Council<br>J. Arthur Moriarity,<br>Boston Typographical Union | Harry H. Kerr,<br>Boston Gear Works, Inc.<br>Everard Stubbs,<br>Fellows Gear Shaper Co. | 1 |
| J. H. DeCantillon,<br>International Association of Machinists<br>Thomas Kearney,<br>Electrical Workers Union | Carl A. Gray,<br>Grenby Manufacturing Co.<br>Richmond Viall,<br>Brown & Sharpe Mfg. Co. | 2 |
| (To be appointed) | (To be appointed) | 3 |
| Thomas J. Lyons,<br>N. Y. State Federation of Labor<br>Gustave A. Strebel,<br>N. Y. State Industrial Union Council | R. E. Gillmor,<br>Sperry Gyroscope Company, Inc.<br>J. C. Ward, Jr.,<br>Fairchild Engine & Airplane Corporation | 4 |
| Peter J. Flynn,<br>Industrial Union of Marine & Shipbuilding Workers of America<br>Carl L. Gylling,<br>International Association of Machinists | Thomas R. Jones,<br>American Type Founders, Inc.<br>George E. Stringfellow,<br>Thomas A. Edison, Inc. | 5 |
| Anthony Martinez,<br>Steel Workers Organizing Committee<br>Carl Bersing, Philadelphia Industrial Union Council<br>Charles Sehl, International Association of Machinists<br>David Williams, Pennsylvania Federation of Labor | Earl Sparks,<br>Metal Manufacturing Association<br>L. B. F. Raycroft,<br>Electric Storage Battery Co. | 6 |
| Frank Bender,<br>State Director, C. I. O.<br>F. N. Kershaw,<br>International Association of Machinists | Alonzo G. Decker, Sr.,<br>The Black & Decker Mfg. Co.<br>Stewart Cort,<br>Bethlehem Steel Co. | 7 |
| E. L. Sandefer,<br>Director, C. I. O.<br>T. A. Wilson,<br>N. C. Industrial Commission | Edward J. Robeson, Jr.,<br>Newport News Shipbuilding & Dry Dock Co.<br>Frederick W. Symmes,<br>Union Buffalo Mills Co. | 8 |
| Paul R. Christopher,<br>Tennessee Industrial Union Council<br>Dewey L. Johnson,<br>Georgia Federation of Labor | Ben Sinclair,<br>Georgia Power Co.<br>James F. Vance,<br>Tennessee Coal, Iron, & Railroad Co. | 9 |
| John J. Hurst,<br>Central Labor Council<br>(Another Labor Adviser to be appointed) | Lewis M. Crosley,<br>The Crosley Corporation<br>George A. Seyler,<br>The Lunkenheimer Co. | 10 |
| Clinton Golden,<br>Steel Workers Organizing Committee<br>William G. Shord,<br>International Brotherhood of Electrical Workers | W. G. Marshall,<br>Westinghouse Electric & Manufacturing Co.<br>Henry D. Scott,<br>Wheeling Steel Corporation | 11 |
| Elmer F. Cope,<br>Steel Workers Organizing Committee<br>Albert Dalton,<br>Cleveland Building and Construction Trades Council | Ray S. Livingstone,<br>Thompson Products Co.<br>Warner Seeley,<br>Warner-Swasey Co. | 12 |

# FIELD ORGANIZATION

★ In addition to the names shown, each district staff includes ten or more consultants who are not listed

| DISTRICT | Office Address— | Representative and Assistant— |
|---|---|---|
| 13 | **Michigan** and Lucas County in Ohio<br>610 Boulevard Bldg.,<br>7310 Woodward Ave.<br>**Detroit,** Mich. (Trinity 1–5520) | **M. M. Olander,**<br>Owens-Illinois Glass Co.<br>O. F. Carpenter, Associate Representative<br>Carl Wheaton, Assistant Representative<br>Elvin W. Day, Assistant Representative |
| 14 | **Indiana** (except Lake and Porter Counties)<br>Room 1428<br>Circle Tower Building,<br>**Indianapolis,** Ind. (Market 9411) | **E. H. Adriance,**<br>Eli Lilly and Co.<br>Herbert Kessel,<br>Assistant Representative |
| 15 | **Illinois** (except 3 counties adjacent to St. Louis, Mo.) and 28 counties in Wisconsin and 2 counties in Indiana<br>Room 1441,<br>20 North Wacker Drive,<br>**Chicago,** Ill. (Andover 1744) | **Paul A. Mertz,**<br>Sears Roebuck & Co.<br>John J. Lamb,<br>Assistant Representative |
| 16 | **North Central**<br>Wisconsin (except 12 counties), Minnesota, North Dakota, South Dakota, Iowa, Nebraska<br>Room 1800, Rand Tower,<br>**Minneapolis,** Minn. (Bridgeport 7591) | **Ernest L. Olrich,**<br>Munsingwear Inc.<br>J. R. Rothenberger,<br>Assistant Representative<br>A. B. Algren,<br>Assistant Representative |
| 17 | **South Central**<br>Missouri, Kansas, Oklahoma, Arkansas, Western Tennessee, and 3 counties in Illinois<br>Room 603, Shell Building,<br>**St. Louis,** Mo. (Central 4206) | **A. Earl Wyatt,**<br>Laclede Gas Light Co.<br>C. T. Cardwell,<br>Assistant Representative |
| 18 | **Gulf District**<br>Texas and Louisiana<br>Room 3201, Gulf Building,<br>**Houston,** Tex. (Fairfax 9842) | **Harold Fletcher** (Acting)<br>Hughes Tool Co.<br>Tracy T. Word,<br>Assistant Representative |
| 19 | **Mountain District**<br>Colorado and Wyoming<br>Room 518,<br>U. S. National Bank Building,<br>817 Seventeenth Street,<br>**Denver,** Colo. (Keystone 4151–596) | **George M. Kirk,**<br>Colorado Fuel & Iron Corporation<br>Arthur E. Lawrence,<br>Assistant Representative |
| 20 | **Pacific Southwest**<br>Southern California, Arizona, New Mexico<br>Room 452,<br>Roosevelt Building,<br>727 West Seventh Street,<br>**Los Angeles,** Calif. (Trinity 2104-2105) | **William K. Hopkins,**<br>Columbia Pictures Corporation<br>Charles H. Fishburn,<br>Assistant Representative |
| 21 | **Pacific Central**<br>Northern California, Nevada, Utah<br>Room 702, Newhall Bldg.<br>260 California Street,<br>**San Francisco,** Calif. (Exbrook 0369) | **Alexander R. Heron,**<br>Crown Zellerbach Corporation<br>Aylwin Probert,<br>Assistant Representative |
| 22 | **Pacific Northwest**<br>Washington, Oregon, Idaho, Montana<br>Room 957,<br>Stuart Building,<br>Fourth and University Sts.,<br>**Seattle,** Wash. (Eliot 6404) | **Maj. Gen. H. G. Winsor,**<br>Puget Sound Power & Light Co.<br>Leighton H. Steele,<br>Assistant Representative |
| | **Oregon District**<br>Room 1006,<br>Bedell Bldg.,<br>**Portland,** Oreg. (Broadway 0380) | Laurin E. Hinman,<br>Assistant Representative |

# Advisers

# Districts 13 to 22, inclusive

| Labor Advisers— | Management Advisers— | DISTRICT |
|---|---|---|
| John Reid,<br>Michigan Federation of Labor<br>Walter Reuther,<br>United Automobile Workers of America | Willis H. Hall,<br>Detroit Board of Commerce<br>Frank Rising,<br>Automotive Parts & Equipment Manufacturers, Inc. | 13 |
| James C. Robb,<br>Congress of Industrial Organization<br>Roy Creasey,<br>International Brotherhood of Electrical Workers | J. M. Smith,<br>RCA Manufacturing Co., Inc.<br>Frank S. O'Neil,<br>Link Belt Co. | 14 |
| George E. Mischeau,<br>Steel Workers Organizing Committee | Harold F. North,<br>Swift & Company<br>L. J. Parrish,<br>A. O. Smith Corporation | 15 |
| Sander Genis,<br>Congress of Industrial Organization<br>George Lawson,<br>Minnesota Federation of Labor | Harry W. Clark, Hugo Manufacturing Co.<br>Fred Crosby, American Hoist & Derrick Co.<br>C. L. Mandelert, Chippewa Falls Woolen Mill Co.<br>Herbert J. Miller, Minnesota State Resources Commission<br>Gust Olson, Jr., Deere & Co.<br>Karl Vogel, Omaha Steel Works | 16 |
| Joseph P. Clark,<br>Central Trades and Labor Union of St. Louis and Vicinity<br>A. F. Kojetinsky,<br>Steel Workers Organizing Committee | Wilbur B. Jones,<br>St. Louis Chamber of Commerce<br>Walter Siegerist,<br>Medart Co. | 17 |
| Simeon Hyde,<br>Congress of Industrial Organization<br>A. S. McBride,<br>American Federation of Labor | W. L. Childs,<br>Reed Roller Bit Company<br>Harold Fletcher, Hughes Tool Co.<br>David Harris, Humble Oil Co. | 18 |
| Martin Cahill,<br>Wyoming Federation of Labor<br>Floyd F. Miles,<br>Labor Counsellor | Harold F. Silver,<br>Silver Engineering Works, Inc.<br>Charles O. Voigt,<br>The Stearns-Roger Mfg. Co. | 19 |
| Cornelius J. Haggerty,<br>California Federation of Labor<br>James G. Thimmes,<br>Steel Workers Organizing Committee | David T. Babcock,<br>Blythe and Co., Inc.<br>Garner A. Beckett,<br>Riverside Cement Co.<br>Arthur H. Young,<br>California Institute of Technology | 20 |
| J. Scott Milne,<br>International Brotherhood of Electrical Workers | Adam S. Bennion,<br>Utah Power & Light Co.<br>James R. Moore,<br>Moore Dry Dock Co.<br>T. S. Petersen,<br>Standard Oil Co. of California | 21 |
| Richard C. Francis,<br>Congress of Industrial Organization<br>H. S. McIlvaigh,<br>Tacoma Central Labor Council | Ernest R. Hinton,<br>Olympia Steel Works<br>W. Walter Williams,<br>Continental, Inc. | 22 |
| William Dalrymple,<br>Congress of Industrial Organization<br>D. E. Nickerson,<br>Oregon Federation of Labor | Morris H. Jones,<br>Jones Lumber Co.<br>Ross McIntyre,<br>International Sales & Produce Co. | |



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# High Spots in the "TWI" program

**1** This is *not a policy-making program.* It does not determine whom an employer shall hire, how many, or when.

**2** It is a practical *advisory service,* dealing with training methods and procedures. It disseminates the latest, factual information based on *current experience of industry.*

**3** It is *concerned only with workers on pay rolls,* where training is carried out right on the job within plants. *Workers learn by doing—produce while learning!*

**4** It shows employers how to get skilled operation *from all grades of workers* by analysis of jobs and intensive instruction.

**5** It aids in the development of *practical plans for upgrading workers* to higher skilled jobs as rapidly as their ability warrants.

**6** It renders specific aid in the *development of supervisors* so that they become better managers.

**7** Services of the Federal Committee on *Apprenticeship* are closely related to the in-plant "TWI" activities for the more *rapid development of all-around skilled craftsmen.*

**8** It works for *closer cooperation* of the local governmental agencies carrying on placement, preemployment training, and supplementary instruction, so that the employers' needs for definite skills are met

**9** The entire "TWI" program is carried on with the advice and *backing of both labor and management.*

**10** Training Within Industry service is rendered by *experienced industrial personnel and training experts loaned to OPM by industry itself.*

***CONTACT YOUR NEAREST "TWI" DISTRICT OFFICE FOR COMPLETE DETAILS***

U. S. GOVERNMENT PRINTING OFFICE 16—25971-1